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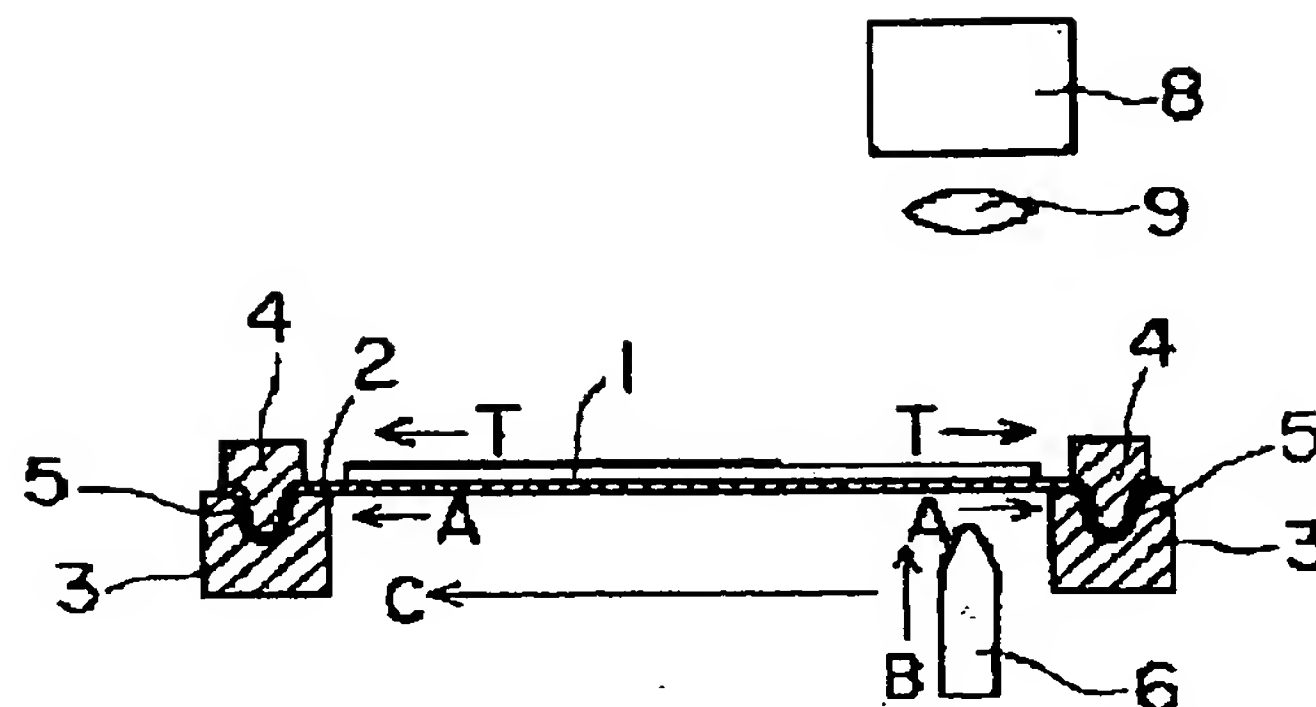
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APPLICANT : ROHM CO LTD;

INVENTOR : ICHIHARA ATSUSHI;

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TITLE : METHOD FOR DIVIDING SUBSTRATE
AND MANUFACTURE OF LIGHT
EMITTING ELEMENT USING THE
METHOD



ABSTRACT : PROBLEM TO BE SOLVED: To easily divide a substrate with a small cutting-margin by applying an external force to the substrate, projecting light to the part, where stress caused by the external force is concentrated, of the substrate, and generating a crack with the heat of the projected light.

SOLUTION: A wafer 1 is stuck on a tape 2, and by stretching tape 2 radially outward, a tension T is applied to the tape 2. In this state, the thrust piece 6 is moved up to warp the wafer 1 convexly. The wafer 1 is raised into a roof shape by the generally linear contact of a linear tip part of the thrust piece 6 with the tape 2. The laser beam of a light source 8 is projected through an optical lense 9 onto the part where stress caused by the thrust piece 6 is concentrated, i.e., the edge of the curved part. During the laser projection, a specified tension is applied by holding members 3 and 4 on both sides of the edge of the wafer 1, and hence a crack is generated at the edge by the thermal stress due to the heating of the laser light. Further with the reception of the external force load from the thrust-piece 6, division is performed along the edge.

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